SANTA CRUZ BIOTECHNOLOGY, INC.

Dynactin 3 siRNA (h): sc-92863

BACKGROUND

Dynactin, a multisubunit complex, is a cytoplasmic Dynein-interacting protein that functions as the "receptor" for the Dynein microtubule motor. Dynactin/Dynein binding may be required for most, if not all, cytoplasmic Dynein-driven activities and is thought to contribute to the functional diversity of Dynein. Enriched in neurons, Dynactin also binds to microtubules and has been shown to function in diverse processes, including organelle transport, formation of the mitotic spindle and cytokinesis. Dynactin 3, also known as Dynactin complex subunit 22 kDa subunit or p22, is a 186 amino acid subunit of the Dynactin complex. Dynactin 3 localizes to punctate cytoplasmic structures, to the centrosome during interphase and to the kinetochores and spindle poles throughout mitosis. Ubiquitously expressed, Dynactin 3 is found at highest levels in pancreas and muscle.

REFERENCES

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PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: DCTN3 (human) mapping to 9p13.3.

PRODUCT

Dynactin 3 siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Dynactin 3 shRNA Plasmid (h): sc-92863-SH and Dynactin 3 shRNA (h) Lentiviral Particles: sc-92863-V as alternate gene silencing products.

For independent verification of Dynactin 3 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-92863A, sc-92863B and sc-92863C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Dynactin 3 siRNA (h) is recommended for the inhibition of Dynactin 3 expression in human cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Dynactin 3 gene expression knockdown using RT-PCR Primer: Dynactin 3 (h)-PR: sc-92863-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.